Datasheet

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CableFree
Wireless Excellence

Emerald Cellular Product Range (4G/5G/LTE)

2x2 MIMO 4G/5G Base Station Canister Antennas 3.3-4.2GHz

Overview

About Wireless Excellence

Founded in 1996 and with headquarters in Oxford UK, Wireless Excellence Limited is a leading designer and supplier of outdoor and indoor Broadband Wireless communication products.

With a complete range of solutions including Radio, Microwave, Millimeter-Wave, Free Space Optics, WiFi and 4G/5G/LTE, customers in over 80 countries have chosen Wireless Excellence as the "one stop shop" solution of choice for dependable wireless networking.

About LTE Base Stations

Using the latest Software Defined Radio and RF technology, our cellular Base Station products operate in all the common cellular bands from 380MHz-4400MHz, distances over 20km and high net throughput to subscriber devices.
Our advanced LTE Cellular Base Station platform with IP/Ethernet interfaces supports LTE Release 14/15 and offers software updates for future features. Flexibility, performance and low cost of ownership are ensured.

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CableFree 4G/5G/LTE Sector Canister Antennas:

XPol 3300~4200MHz 65° 8.5dBi Antenna

0°~10° Downtilt Control using Manual or optional RCU (Remote Control Unit)

Electrical Specifications		
Frequency Range	MHz	3300 – 4200
Polarisation	Degree	+/- 45 Slant Linear
Gain	dBi	8.5
Azimuth Beamwidth	Degree	360
Elevation Beamwidth	Degree	12
Electrical Downtilt	Degree	0 – 10
Electrical Downtilt Deviation	Degree	1
Impedance	Ohms	50
VSWR	<	1.5
Return Loss	dB	14
Isolation	dB	25
Upper Sidelobe Suppression, Peak 20 degrees	dB	16
Cross-Polar Discrimination	dB	12
Maximum Effective Power per Port	W	50
Mechanical Specifications		
Dimensions	mm (in)	700 (27.5) x 125 (4.9)
Packing Size	mm (in)	770 (30.3) x 190 (7/4) x 250 (9.8)
Net Weight (Antenna)	kg (lb)	3 (6.6)
Net Weight (Mount)	kg (lb)	2 (4.4)
Shipping Weight	kg (lb)	6 (13.2)
Connector Type	-	N-Type
Connector Quantity	-	2
Connector Position	-	Base
Windload Frontal (@ 150km/h)	N (lbf)	80 (18)
Windload Lateral (@ 150km/h)	N (lbf)	80 (18)
Survival Wind Speed	km/h (mph)	200 (125)
Radome Material	-	UV-Stabilised PVC
Radome Colour	RAL	7035
Product Compliance Environmental	-	RoHS
Lightning Protection	-	DC Grounded
Cold Temperature Survival	C (F)	-40 (-40)
Hot Temperature Survival	C (F)	+70 (158)

Note the optional RCU (Remote Control Unit) allows remote control of antenna downtilt.

For more information about this option, please contact us

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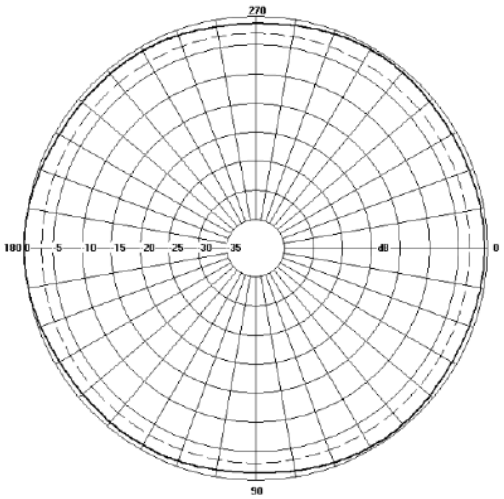
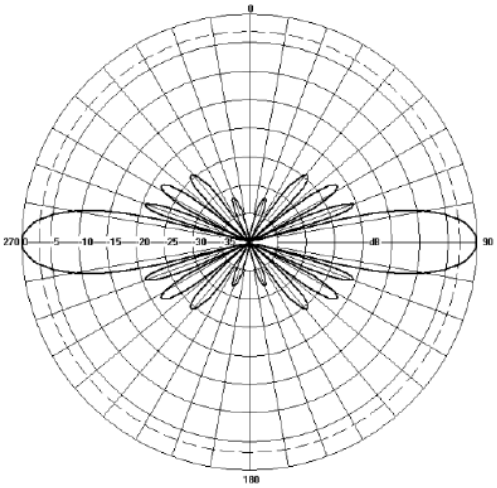
Note: Due to policy of continuous product improvement, product specifications may change without notice

Antenna Patterns



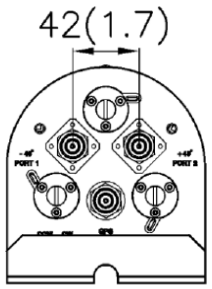
Azimuth

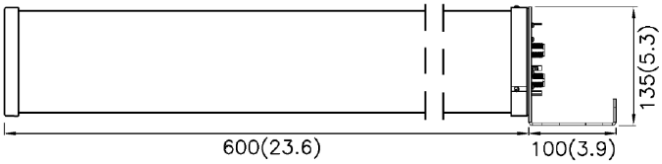


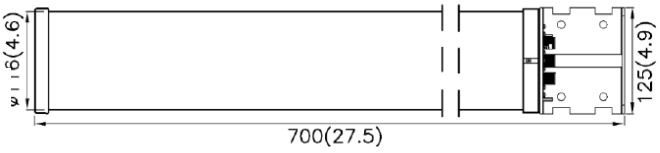
Elevation

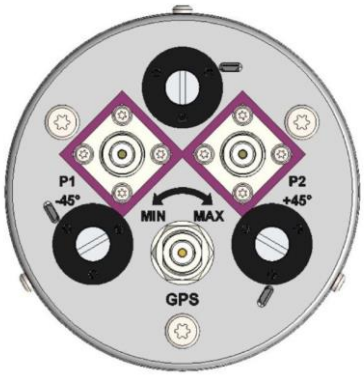
Antenna Images

All measurements are in mm (in)









For More Information

Please contact Wireless Excellence technical department for more information on CableFree 4G/5G/LTE Antennas

Design Services

Wireless Excellence offers a design service for microwave and LTE radio networks including link budgets, availability calculation and overall network design to meet a wide variety of customer needs.
Please contact Wireless Excellence for more information on our design services.

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